



Thanet District Council

NET ZERO STRATEGY

2023

thanet.gov.uk/climate-emergency

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FOREWORD

From Cllr Bob Bayford, Cabinet Member for Environmental Services and Special Projects

The world is under threat from global climate change which will impact everyone. The Isle of Thanet will not be immune to these impacts and that is why the council declared a climate emergency back in 2019. Tackling Climate Change is a priority for us.

Thanet District Council will act quickly, doing what we can within our resources and powers to reduce the greenhouse gas emissions that we directly produce and aiming for net zero by 2030.

We will also aim to reduce emissions that are partially within our control as soon as possible e.g within our projects, the things we buy and our social housing

Furthermore, we want to support Kent County Council, the Government, business, industry and the community to reach net zero by 2050 for the whole District, and avoid the worst impacts of climate change.



The purpose of this strategy is to show how we will meet our net zero pledge and how we will work with others in this mammoth task. However, we won't be able to do this by ourselves and so we call on residents to help in the fight against climate change in whatever way they can.

INTRODUCTION

What is climate change?

Fossil fuels are stored carbon which were formed thousands of years ago from the bodies of animals and plants. Since the industrial revolution humans have been mining and burning them. The burning of this stored carbon has produced large volumes of carbon dioxide gas which is now at extreme levels in our atmosphere. Carbon dioxide gas holds heat in our atmosphere and is causing the warming of the planet. The planet will continue to heat up unless we stop burning fossil fuels.

Although the impact isn't as significant as the burning of fossil fuels, the change in our eating habits also contributes to global warming. In the past we did not eat as much meat as we do now. However, over the past 50 years, more cows and sheep have been reared. These animals produce another gas which holds heat in our atmosphere called methane. Methane levels have been increasing each year and will continue to do so until we reduce our meat consumption. Worldwide agricultural practices are also responsible for over 90% of worldwide deforestation, as forests are cleared for food (mainly meat) production¹.

The impact of the high level of carbon dioxide and methane (greenhouse gases) in our atmosphere will cause worldwide heatwaves, droughts and flash floods. Sea levels will also rise causing low lying areas to flood and

pests and diseases will also move north from tropical regions.

This climate disruption will mean that some areas of the world will become inhabitable due to heat, sea level rise or collapsed food systems and there could be great food insecurity. We have already seen devastating fires in Australia and Greece, heat waves in North America and India, floods in Germany, melting ice caps and dying coral reefs due to ocean warming. The past decade has contained the hottest years on record and this year the UK hit 40°C, showing that we need to act fast to avoid further severe impacts of climate change.

The reality of this situation can cause eco-anxiety. Please see Appendix A if you would like assistance with this.

However, you can do something about climate change - individual action does make a difference and will not just prevent climate change but will produce a more positive, vibrant future.

If you would like to calculate your carbon footprint: Giki zero is easy to use and fun: <https://zero.giki.earth/>

The Jump campaign encourages people to reduce their carbon footprint in fun and interesting ways:

<https://takethejump.org/>

¹ <https://www.fao.org/newsroom/detail/cop26-agricultural-expansion-drives-almost-90-percent-of-global-deforestation/en>

What is being done in the UK and in Kent?

In 2019, the UK became the first major economy in the world to legislate a binding target to reach net zero emissions by 2050. Following the release of the Sixth Carbon Budget (CCC², 2020)³ Prime Minister Boris Johnson agreed to legislate a new target to reduce the United Kingdom's emissions by 78% by 2035, including emissions from international shipping and aviation (gov.uk, 2021).

Major announcements have included the banning of new gas boilers in new developments by 2025, the halt of the sale of petrol and diesel cars by 2030 and hybrid cars by 2035 and the greening of electricity by 2035. These actions put the UK on route to net zero by 2050.

As an overview, in order to reach net zero the UK needs to do the following:

- Produce electricity from renewable sources - e.g. solar and wind.
- Everything that can be powered by electricity needs to be powered by electricity e.g. transport, industry and equipment. This is because electricity can be generated by renewables whereas gas, petrol and diesel cannot (in the volumes that we need).
- Heating will also need to become electrified in the future e.g. by installing air source or ground source heat pumps.

² The Climate Change Committee is an independent, statutory body established under the Climate Change Act

³ <https://www.theccc.org.uk/publication/sixth-carbon-budget/>

- Individuals will need to make low carbon choices such as reducing use of personal vehicles, reducing meat consumption and considering purchases.

Kent County Council produced a Climate Change Risk and Impact Assessment for Kent and Medway⁴ and reported on the risks to Kent due to climate change. These include flash floods, droughts and heat waves which could cause disruption to homes, businesses and transport as well as risks to health.

They concluded that decisions made today will have lasting effects on residents, services, the natural environment, infrastructure and finances over the coming decades.



⁴ <https://www.kent.gov.uk/environment-waste-and-planning/climate-change/kents-changing-climate/climate-change-risk-and-impact-assessment>

Thanet District Council's work

TDC called a Climate Emergency on 11 July 2019. An officer working group and a cross party councillor working group was formed to initiate actions on a first environmental action plan. All of the actions within this first action plan have been completed and in December 2021, the working group was changed to a cabinet advisory group to produce this strategy and action plan, focussed specifically on the reduction of greenhouse gas emissions.

TDC's Climate Change pledge ⁵

We pledge to do what is within our powers and resources to:

- make Thanet District Council net zero by 2030 in our core carbon footprint (this includes emissions we have direct control over e.g. the estates and activities that we own and manage)
- address emissions that TDC has partial control over (those outside of the core carbon footprint e.g. projects, procurement and social housing) as soon as possible, and by 2050 at the latest.
- support KCC, the Government, business, industry and the community to make Thanet as a whole net zero by 2050.

In order to make these targets possible we will:

- call on Westminster to provide the powers and resources to make the targets possible;
- continue to work with partners across the county and region to deliver this new goal through all relevant strategies;
- investigate all possible sources of external funding and match funding to support this commitment

⁵ See Appendix B for notes on this updated wording.

What can I do?

You could also make a pledge within your financial means to reduce emissions created by food, home, travel, purchases or activities.

 <p>Food is about a quarter of your carbon footprint. (It is 26% of the world's total greenhouse gases). The single biggest way to reduce your impact right now is to reduce your meat and dairy intake. Pledge to:</p> <ul style="list-style-type: none"> • Eat less meat, especially beef and lamb as these animals produce methane (a strong greenhouse gas). Also, agriculture, especially the meat industry, is responsible for 80% of worldwide deforestation. • Learn some vegetarian/vegan recipes and increase the fruit and veg in your diet • Always make a shopping list and meal plan before you go shopping to avoid food waste 	 <p>Energy and emissions go into producing every new product and item, so buying new things comes with a high carbon cost. Pledge to:</p> <ul style="list-style-type: none"> • Always consider if you really need to purchase an item before you buy it. • Hire/borrow items e.g. gardening/DIY tools • Share items between neighbours/family members e.g. puzzles/computer games/tools. • Buy pre loved items from charity shops or social media groups (e.g. Freecycle.org) • Refrain from buying something for a month or even a whole year e.g. pledge to not buy brand new clothes (apart from underwear maybe!).
 <p>The electricity and gas we use to power and heat our homes produces about a quarter of our greenhouse gas emissions which make up our carbon footprint. Pledge to:</p> <ul style="list-style-type: none"> • Change to a 100% renewable electricity supplier • Investigate installing (more) wall and roof insulation for a better insulated home (contact our home energy officer for assistance with funding opportunities energysaving@thanet.gov.uk) • Turn off appliances/heating/lighting/gadgets when not using them. 	 <p>The things we do for fun can bump up our carbon footprint. Pledge to:</p> <ul style="list-style-type: none"> • Investigate new hobbies that are low carbon e.g. singing, walking, jogging (google Couch to 5km), cycling. • Consider having fun without buying things. • Find great places to visit locally rather than flying abroad in the future.
 <p>Everytime we get into a vehicle (unless it is fully electric and the electricity comes from renewable sources) greenhouse gases are produced. Pledge to:</p> <ul style="list-style-type: none"> • Walk/cycle where possible and get fit! • Adapt your future commute to be car free. • Pledge to reduce your future flying (flightfree.co.uk) 	 <p>We can really inspire others to think about their carbon footprint and reduce climate change. Pledge to:</p> <ul style="list-style-type: none"> • Speak to friends and colleagues and tell them what you are doing. • Encourage your family and workplace to reduce their carbon footprint. • You can also try calculating your footprint and getting tailored suggested for free through Pawprint: www.pawprint.eco/

The Jump campaign encourages people to take the JUMP in at least one of the six categories below to reduce your carbon footprint. See the website for more information on each 'jump' <https://takethejump.org/>

<p>HOLIDAY LOCAL</p> <p>One flight every three years</p>	<p>DRESS RETRO</p> <p>Three new items of clothing per year</p>	<p>CHANGE THE SYSTEM</p> <p>At least one life shift to nudge the system</p>	<p>EAT GREEN</p> <p>A plant based diet — no waste, healthy amount</p>	<p>END CLUTTER</p> <p>Keep products for at least seven years</p>	<p>TRAVEL FRESH</p> <p>If you can, no personal vehicles</p>
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THE STRATEGY

The strategy shows how we will meet this pledge and is split into addressing emissions in TDC's core carbon footprint, wider TDC emissions and Thanet wide emissions.

The data for TDC's core carbon footprint and Thanet wide emissions has been calculated and is clearly laid out, and 12 priorities to address these emissions have been agreed. Each priority is described and then specific, immediate actions to 2024 are then set out. The actions have been agreed with the TDC directors and officers across the council and the action plan will be monitored at regular intervals by the cabinet advisory group, as well as externally audited.

The strategy sets out how we will:

- Reduce the greenhouse gas emissions in TDC core carbon footprint which we have direct control over and how we will aim to reach net zero by 2030.
- Reduce emissions in other areas that TDC has only partial control e.g. emissions within our projects, procurement and social housing emissions, reaching net zero as quickly as possible.
- Support KCC to reduce emissions from housing, transport, industry and commercial sectors District wide
- Assist the reduction of greenhouse gas emissions in the Thanet through local planning policies
- Assist residents with the right information to make low carbon choices to reduce emissions from their carbon footprints, addressing emissions from consumption.

With regards to district wide emissions, KCC has responsibility for the following areas:

- Schools
- Highways
- Transport
- Waste Disposal

And so TDC will play a supporting, rather than direct role in reducing these emissions.

The UK Government is responsible for the reduction of emissions from airports, ports and military transport. For example, the Government's approach for achieving net zero aviation by 2050 is set out in their Jet Zero Strategy. TDC has no powers with regards to these emissions however we will keep a watching brief on Manston Airport's adherence to their low emission plan.

We will also work with all residents of the district. The Climate Change Committee points out:

"More than ever before, future emissions reductions will require people to be actively involved. This need not entail sacrifices. Many people can make low carbon choices, about how they travel, how they heat their homes, what they buy and what they eat. The experience of the UK Climate Assembly shows that if people understand what is needed and why, if they have options and can be involved in decision-making processes, they will support the transition to Net Zero."

The principles of the Net Zero Strategy

We aim to ensure that this will be a **fair transition** to net zero which will not financially impact those already disadvantaged in Thanet. Some new low carbon technologies e.g. electric cars and heat pumps are unaffordable for many residents currently. The actions within this plan will not add to the inequalities in society.

It however calls on residents to help in the fight against climate change in whatever way they can and encourages individuals to feel empowered to take action. We will promote ways to reduce emissions which do not cost any extra or that can be achieved through grants.

The net zero strategy aims to not only avoid the serious impacts of climate change but stimulate the economy and create a healthier society. For example, TDC will work with KCC to increase employment within the housing retrofit sector. This will not only increase job opportunities but also produce warmer, more energy efficient homes which will be cheaper to run. Net zero actions also reduces air pollution and encourages us to be healthier, by eating more fruit and vegetables and walking and cycling more.

The risks of not acting, or delaying acting, on climate change will affect us all, but the poorest in society will suffer the greatest risk, for example, through the rising cost of food and the lack of financial resilience to disasters. If we do not act quickly, the risks of ecological breakdown and extreme heating will get worse.

It is important that we address climate change now as a matter of fairness and equality.

The Stern Report ⁶ demonstrated that the cost of doing nothing to combat climate change far exceeded the cost of tackling climate change. The cost of living crisis will not get better, but worse if we ignore this emergency.

The benefits of strong and early action far outweigh the economic costs of not acting and so we will act now.



⁶ <https://www.lse.ac.uk/granthaminstitute/publication/the-economics-of-climate-change-the-stern-review/>

1. REDUCING THE CORE CARBON FOOTPRINT OF TDC, AIMING FOR NET ZERO BY 2030

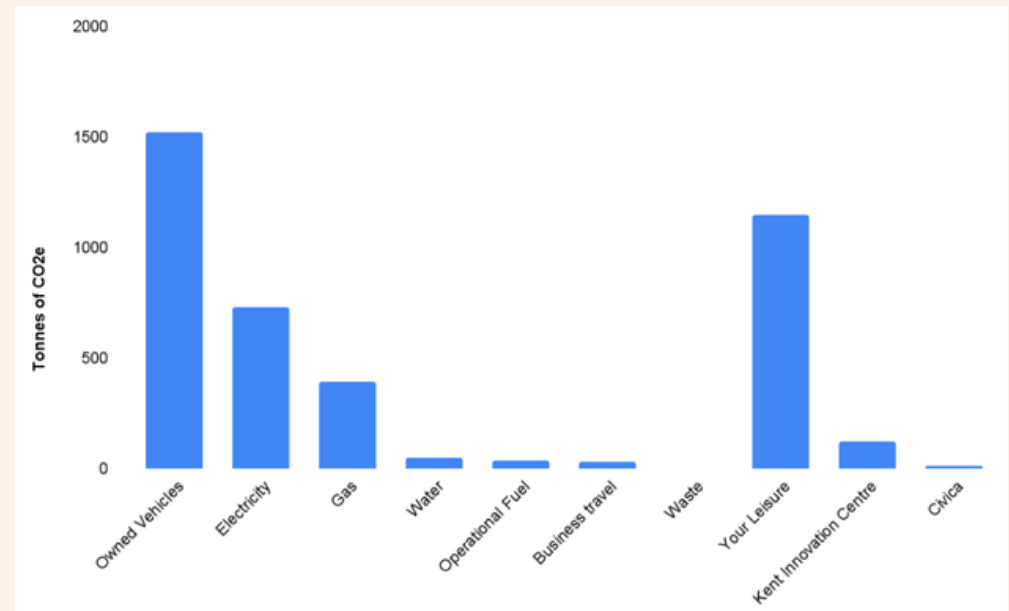
The core carbon footprint of the council includes all estates we own and manage and our core activities. The leisure centres which are leased to Your Leisure have also been added, as it is viewed that they would likely be run by the council if they were not leased out.

TDC's carbon footprint totals 4054 tonnes of CO₂e. The graph below shows how this is broken down into various emission sources.

From the left, it shows greenhouse gas (GHG) emissions from our owned vehicles, emissions from electricity use and gas use (mainly in our offices and the crematorium), emissions from our water use, operational fuel (equipment such as lawn mowers/strimmers) and emissions from our business travel. The last bars on the right hand side are emissions from the two leisure centres, the Kent Innovation Centre and outsourced services (Civica).

This shows that a large percentage of emissions are from our owned vehicles. Further investigation shows that a large proportion of these are from the waste collection rounds.

The heating and powering of our offices is also a significant part of our carbon footprint. There is also a



large volume of emissions from the two leisure centres (Ramsgate and Hartsdown), which is mainly from their gas use.

Emissions from our water use are not large but still significant, as are the emissions from our business travel and the fuel used in our open spaces department (operational fuel). The emissions from TDC's waste is so small it cannot be seen on the graph as it is only the waste from the offices and depots that we occupy.

Aiming for Net Zero by 2030

An overview of what TDC needs to do to reach net zero is as follows:

We need to reduce our reliance on gas throughout the buildings we own and manage and also the leisure centres (~1200 tonnes) by:

- Increasing insulation
- Replacing the gas boilers with air source /ground source heat pumps where possible. Heat pumps can use renewable electricity rather than polluting fossil fuels.

We will need to reduce our electricity use and source renewable electricity (~730 tonnes) to reduce our emissions associated with electricity. Addressing the emissions from TDC owned and managed offices and leisure centres is priority 1 in the strategy.

TDC also needs to reduce emissions from the fleet (~1500 tonnes) by electrifying as many vehicles as possible. This is because electricity can be sourced through renewable means whereas fossil fuels cannot be. We also need to reduce business travel (~30 tonnes) as much as possible.

We will also need to invest in electric equipment in our open spaces department (~40 tonnes) and also reduce water use (~50 tonnes) where possible.

Addressing the emissions from TDC fleet and equipment is priority 2.

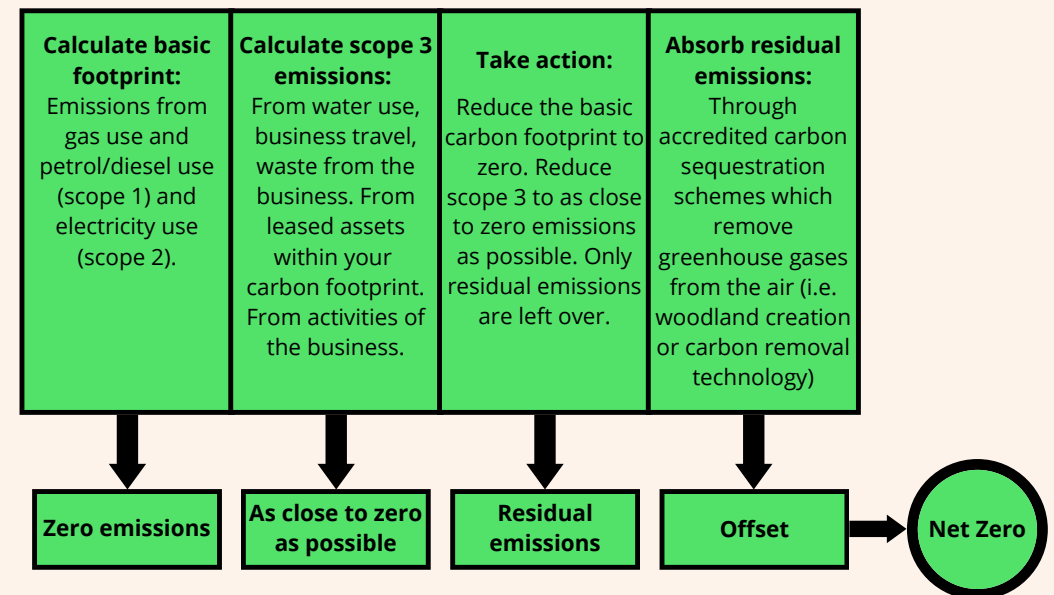
In order to reach net zero, TDC must reduce the emissions from the calculated carbon footprint to such a small volume that the leftover emissions can be absorbed by woodland creation or by accredited carbon sequestration projects (priority 3).

See the figure below for further explanation on the correct route to net zero.

The [TDC Carbon Reduction Plan](#) details the route to net zero by 2030 in our core footprint. It can be found at the bottom of the Net Zero TDC webpage:

thanet.gov.uk/netzero/

See the figure below for further explanation on the correct route to net zero.



Overview of priorities 1 - 3

Below is an overview of a theoretical route that we are aiming towards to reach net zero by 2030. It is clear that TDC will need to source external funding to install heats pumps in our offices and a leisure centre and to assist with the electrification of the large vehicles in the fleet including the waste carrier vehicles.

As stated in our pledge: We will call on Westminster to provide the powers and resources to make the 2030 target possible.



Cost of reaching Net Zero by 2030

TDC employed consultants, Laser, to assist them in creating a carbon reduction plan for the 2030 net zero target. Please see Appendix D for the emissions reduction model.

Laser concluded that to reach net zero by 2030 an investment of approximately £9.6 million will be needed.

There will be approximately £4 million savings to 2030 and therefore **the net cost to the council by 2030 will be approximately £5.6 million.**

The main investments needed to reach net zero by 2030 include:

1. Energy efficiency measures throughout the estates
2. LED lighting
3. A small solar PV array
4. Changing the gas boilers to heat pumps (at least at the Kent Innovation Centre and Ramsgate Leisure Centre)
5. Replacing the diesel car derived vans for electric
6. Replacing the diesel waste carrier vehicles for electric
7. Offsetting the left over emissions

Early energy efficiency measures such as installation and solar pv should provide profit on the investment to 2030 and the installation of LED lighting will be profitable by 2050. These projects could therefore be carried out on an invest to save basis.

Many of the other actions will need external funding as they do not return the investment by 2030 or even by 2050 e.g. heat pump installation and the electric waste carrier vehicles. There are possible funding streams for the installation of the heat pumps (the Public Sector Decarbonisation Fund) but there is no government funding for the electrification of waste carrier vehicles currently.

Further details are within the Carbon Reduction Plan found at the bottom of the Net Zero TDC webpage: thanet.gov.uk/netzero/



2. REDUCING EMISSIONS TDC HAS PARTIAL CONTROL OVER

TDC also wants to address the emissions from other activities which are outside the scope of our net zero 2030 target and set targets to reduce these by 2050 at the very latest. The reason why they are outside the 2030 target is because they are not completely within our control. For example, the emissions from our essential coastal engineering works is mainly due to emissions created in the concrete industry. We will however always source the lowest carbon concrete and building materials possible.

The emissions within our purchases (procurement) are also outside our 2030 target as many companies that we purchase from are aiming towards a 2050 target, not a 2030 target. However, we will not ignore the emissions from our procurement - we will calculate them and set targets to reduce them by stipulating new procurement rules. We will make it clear that we want to work with companies that take net zero seriously. We have already added questions such as “Do you calculate your carbon footprint and what are you doing to reduce it?” in our invitation to quote and tender documents.

With regards to the emissions within our social housing, we have already estimated the emissions and **released** the Social Housing Decarbonisation Strategy alongside this Net Zero Strategy. This sets out ambitious targets to reduce emissions in this sector.

Following public engagement, clear interim targets to 2030 and 2040 will be set out in the 2024 net zero action plan.

Other emissions that we will estimate and set ambitious targets for going forwards include: Emissions from decisions and projects (priority 4) procurement (priority 5) and social housing building and tenants (priority 6)



3. ASSISTING THE REDUCTION OF THANET WIDE EMISSIONS, AIMING FOR NET ZERO BY 2050

Thanet wide GHG emissions come from the energy we use, emissions associated with land use and emissions from everything we buy/consume e.g. food, clothing, furniture.

Kent County Council leads on much of the district-wide emissions reduction work. The Kent and Medway Energy and Low Emissions Strategy and implementation plan can be found on their [website](#). Local councils work with KCC on this through the Climate Change Network, which meets regularly. More details can be found in Appendix D.

Emissions from direct energy use

The government produces a breakdown of carbon dioxide (CO₂) emissions by Local Authority area from their energy consumption.

The emissions from energy use are attributed to five sectors:⁷

- Industry (61 100 tonnes)
- Commercial sector (110800 tonnes e.g. shops)
- Public sector (27800 tonnes e.g. buildings associated with services such as hospitals and libraries)
- Domestic (187,000 tonnes e.g. housing)
- Transport (128,100 tonnes)

⁷ <https://www.gov.uk/government/publications/regional-energy-data-guidance-note>

The largest percentage of emissions in Thanet is due to heating and powering houses (residential) and from the transport sector. The total emissions is approximately 515000 tonnes (515k tonnes).

This is more than 100 times the emissions of the TDC core carbon footprint (4054 tonnes). It is therefore very important that we support KCC and other stakeholders to reduce these district wide emissions by 2050.

Emissions from land

The land can also absorb or release emissions. The land of Thanet actually releases a small volume of emissions (400 tonnes) each year rather than absorbs them.⁸

Thanet's tree cover absorbs approximately 300 tonnes, the grassland absorbs 4600 tonnes, the cropland emits 1900 tonnes and the emissions released due to change in land use from settlements is 3400 tonnes of CO₂e.

It is important to point out however that even if the land did absorb emissions, it would still only absorb an exceptionally small volume of what we produced as a District. Therefore, **although it is important to improve the land so it absorbs more emissions and biodiversity is improved, it is more important to reduce emissions.** For example, the emissions absorbed by the trees and grassland is only 1% of the emissions released due to the energy use of Thanet. This imbalance is reflective of the whole world issue and shows that emissions should be reduced first and foremost.

⁸ From the UK Local authority and regional carbon dioxide emissions national statistics for the land use, land use change and forestry (LULUCF).

Reduction of emissions, not offsetting

It is important that we do not rely on offsetting. One hectare of woodland absorbs just 270 tonnes of carbon dioxide over 30 years of its life (not each year). This means that Thanet would need to plant 57 thousand hectares to offset the carbon footprint of energy emissions over 30 years.⁹ Thanet is only 10 thousand hectares in size and therefore we would need nearly six Thanets to just offset emissions from our energy use.

How much woodland is needed to offset an individual's carbon footprint?

When we look at an individual's carbon footprint, which is approximately 10 tonnes annually, over 30 years the emissions total 300 tonnes. This means that each person would need to plant a whole hectare of woodland now to offset their carbon footprint to 2050 (as a hectare offsets 270 tonnes).

As this is completely unrealistic, it is therefore important that each person works to reduce their carbon footprint, rather than simply hope to offset their emissions.

⁹ (515500 x 30 years / 270)

Consumption data for Thanet

When we add on emissions from consumption, the carbon footprint for Thanet goes from 515000 tonnes (energy consumption) to an estimated 1,486,068 tonnes of CO₂e for everything in our carbon footprint.

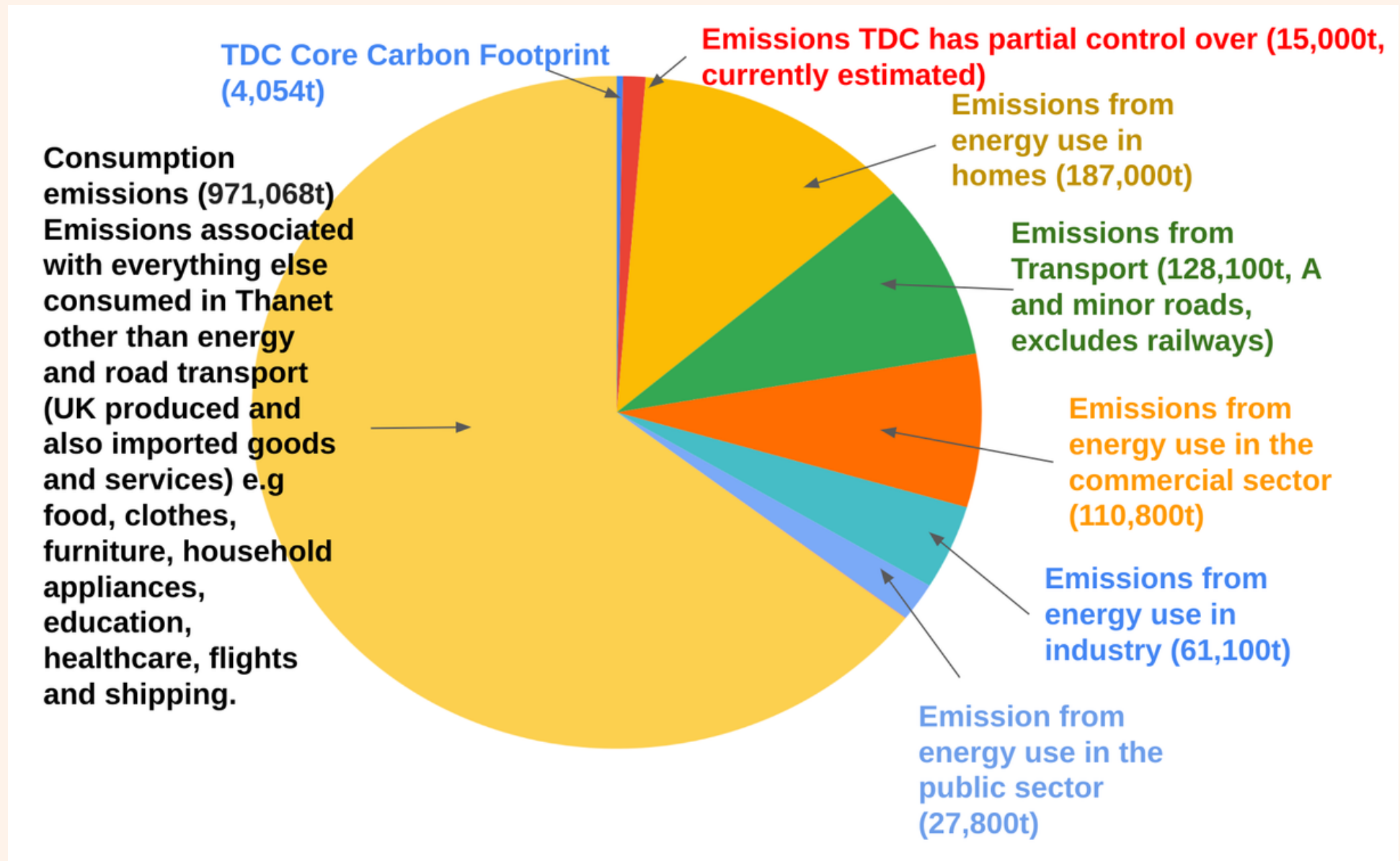
This includes the services used (e.g. education, NHS) and everything else that we buy e.g. household appliances, clothing and food. Approximately 971,068 tonnes of emissions are therefore produced from our consumption (DEFRA)¹⁰ which is nearly double the emissions from the district's energy use. (Calculations shown in Appendix C). This is why it is important to address everything in our carbon footprint, not just the emissions from our direct energy consumption.

The over consumption of things is not only causing excess greenhouse gas emissions, but is also destroying the natural world and causing biodiversity collapse.

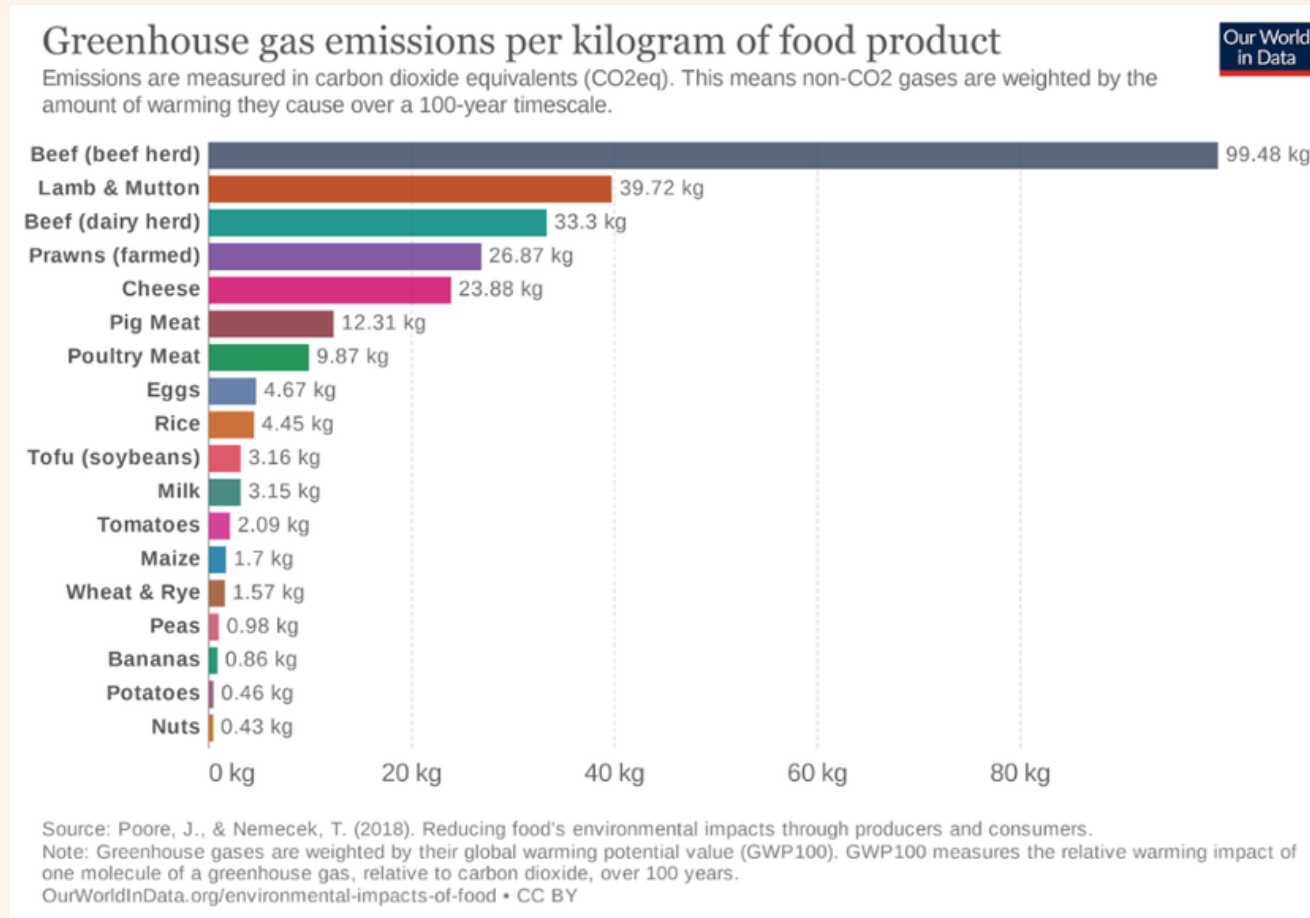


¹⁰ www.gov.uk/government/statistics/uks-carbon-footprint shows consumption data for the UK. It is then pro-rata'd using ONS local authority population estimates. 10.48 tonnes per person.

The following graph shows a pie chart for all the emissions for Thanet. The emissions taken up/ emitted by the land is so small that it cannot be seen on the graph.



What we eat contributes greatly to our carbon footprint, with beef and lamb contributing the most emissions per kg as shown in the next graph. This is because cows and sheep are ruminants and produce a very strong greenhouse gas called methane when they digest their food. The agricultural industry is also responsible for over 90% of worldwide deforestation, as forests are cleared for food (mainly meat) production.¹¹ The reduction of meat consumption is one of the quickest ways to reduce your carbon footprint and environmental impact.



The last 6 priorities of the strategy address the Thanet wide emissions in housing, transport, business and industry, new housing and development, absorbing emissions using the land and addressing the emissions from everything else - consumption.

¹¹ <https://www.fao.org/newsroom/detail/cop26-agricultural-expansion-drives-almost-90-percent-of-global-deforestation/en>

TWELVE PRIORITIES

There are twelve priorities for this strategy. Three that address the 2030 aim for emissions within our control (core carbon footprint), three which address TDC emissions that we have partial control over and six which address district wide emissions. Each of these relate to the emission data set out above.

TDC Net Zero Carbon Footprint

1. Addressing the emissions from TDC owned and managed offices and buildings plus leisure centres
2. Addressing the emissions from TDC fleet and equipment
3. Sequestering/offsetting left over emissions e.g. Woodland Creation

Emissions TDC have partial control over

4. Addressing the emissions in decisions and projects
5. Addressing the emissions within TDC purchases (Procurement)
6. Addressing the emissions within our social housing and other buildings we own

District Wide Emissions (those emissions we don't have direct control over)

7. Addressing emissions in the current housing stock: Thanet housing retrofit action
8. Addressing emissions in Thanet's transport
9. Addressing emissions produced by Thanet's businesses (commercial and industry)
10. Addressing emissions from new housing and development: Local planning
11. Stimulating renewable energy production and Thanetwide carbon sequestration
12. Addressing Thanet wide consumption emissions including emissions from food and purchases: Climate Change Education and Communication

Apart from the TDC Local Plan, KCC is leading on addressing district wide emissions and this is laid out in the Low Carbon Energy and Emissions Strategy.¹²

These 12 priorities are set out in detail below with actions that we will start immediately and aim to complete by March 2024.

¹² https://www.kent.gov.uk/data/assets/pdf_file/0009/112401/Kent-and-Medway-Energy-and-Low-Emissions-Strategy.pdf

Addressing TDC Core Carbon Footprint

1. Addressing the emissions from TDC offices and buildings including leisure centres

Following best practice, an Estates Decarbonisation Plan will be created using the guidance from the government's Heat and Building Strategy¹³ and the Net Zero Estate Playbook.¹⁴

This may need to take place in a number of phases for some buildings and include:

- 1.Reducing energy use through behaviour change
- 2.Decreasing electricity use by swapping to LED lighting
- 3.Reducing gas use by adding insulation
- 4.Decreasing gas use by reducing the flow of the hot water taps/shower heads
- 5.Swapping the gas boilers for low emissions alternatives.
Currently the most efficient option is air or ground source heat pumps
- 6.Adding solar pv to reduce the cost of electricity use and produce our own renewable electricity.

Some of the actions e.g. behaviour change, LED lighting and insulation will likely save TDC money and will be considered as the first steps. The decarbonisation of the heating supply by the installation of heat pumps will be much more costly and

¹³https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1036227/E02666137_CP_388_Heat_and_Buildings_Elay.pdf

¹⁴https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1035417/Net_Zero_Estate_Playbook_1_.pdf

external funding will need to be sought. The Heat and Building Strategy states that for the UK to meet its 2050 net zero targets, heat in virtually all buildings must be decarbonised.

One of the first steps is to understand if there are offices that TDC does not need due to hybrid working. A clear Estates rationalisation plan will need to be drawn up alongside the estates decarbonisation plan.

The four main short term actions to March 2024 are:

- Create a governance structure, estates rationalisation and heat decarbonisation plan
- Create a business plan for the possible employment of a new Energy Efficiency and Heat Decarbonisation Officer
- Aim to reduce the emissions from the estates by 15% by January 2024.
- Understand if a solar farm can be added to TDC land.

2. Addressing the emissions from TDC offices and buildings including leisure centres

This priority includes the aim to purchase electric cars and car derived vans (<3.5 tonnes) when the current diesel versions come to the end of their operational lives from now until 2030. An investigation into the full net cost of electric car derived vans will be the first step. Associated with this is the installation of EV charging points at appropriate TDC locations to enable this to happen.

The electrification of the large waste carrier vehicles is a complex project that will need to be planned soon if they are to be included in the 2030 net zero aim. It involves complex new electric charging infrastructure and possibly a new way of working for many staff using these vehicles. The current waste carrier vehicles have a lifespan to 2028 and electric vehicles will be considered. The cost of these however is currently more than double the diesel versions, and even when taking into account the savings on the cost of the electricity and also reduced cost of maintenance, the uplift in cost will be great.

A fully costed plan will need to be produced as soon as possible to understand these costs and savings. However, there will continue to be considerable uncertainty around both the costs and the operational efficiency of the use of these types of vehicles in the short term as this market develops and matures.

A plan to reduce emissions from TDC's business travel through encouraging the use of public transport or ultra low emission vehicles will also be created. These emissions have already started to reduce through the use of online rather than face to face meetings and flexible working.

A small volume of emissions is generated from the open spaces equipment and a plan will need to be created to purchase electric equipment instead of motorised. The team has trialled some electric equipment in the past few years however, they were not robust enough for the work that they do. New sturdier electric equipment will be trialled as it comes onto the market and will be considered as older equipment comes to the end of its life.



The main short term actions are to:

1. Investigate the uplift in cost of electric car derived vans compared to diesel versions, agree a policy on the purchase of electric car derived vehicles in the fleet replacement scheme, aiming for zero emissions by 2030.
2. Complete a full report of the costs and benefits of purchasing electric waste carrier vehicles (WCV) in 2028.
3. Create policies to reduce emissions from business travel.
4. Create a costed report on options to decarbonise the open spaces equipment, aiming to purchase electric versions as old equipment comes to the end of its life.

3. Sequestering/offsetting left over emissions e.g. Woodland Creation

Realistically, TDC will not be able to reduce all emissions from our estates by 2030. For example, the crematorium has a life span to 2036. We would not want to discard our current cremator and change it for a possible electric version until it came to near the end of its life. Also, some vehicles do not have electric versions currently.

The emissions that are left over in 2030 will need to be absorbed if we want to reach true net zero by that date. The carbon reduction plan calculates this to be approximately 1200 tonnes of CO₂e, reducing to approximately 1000 tonnes of CO₂e if the gas cremator is replaced for an electric version in 2036.

Although all trees absorb carbon dioxide, the planting of individual trees cannot be used to officially offset these left over emissions currently. The planting of individual trees in parks, such as the new large trees planted in Jackey Bakers by TDC cannot therefore be used to offset our carbon footprint.

The planting of individual trees will be addressed in the future Tree and Biodiversity Strategy and action plan, as it is important that trees are planted even if they cannot be used in offsetting. They are important to us for many other reasons such as biodiversity, air quality, addressing heat stress and water runoff, as well as being beautiful to look at and improving mental and physical health.

There is a minimum size of woodland that can be used in the official offsetting scheme. TDC could either create its own woodland if there is appropriate land or pay into a gold standard scheme for carbon sequestration. This may be

through the new Wilder Carbon Scheme which is being created by Kent Wildlife Trust.¹⁵



122 hectares of woodland would need to be planted to offset average annual emissions of 1100 tonnes each year for 30 years.¹⁶

Given the fact that the Isle of Thanet is predominantly farmland, most of which is the best and most versatile agricultural land and not appropriate for woodland creation, it is very unlikely that this level of woodland creation could be achieved. Offsetting schemes will therefore need to be considered.

Scientists will also assess the carbon storage and sequestration potential of all UK seas, as well as within Marine Protected Areas and it is hoped that the report will be available in summer 2023. This report will inform our carbon sequestration plans.

The main short term actions are to:

1. Investigate land owned by TDC for possible woodland creation.
2. If sites are identified, investigate funding to establish woodland to offset TDC's residual emissions
3. Investigate offsetting projects and the cost of these.

¹⁵ <https://www.kentwildlifetrust.org.uk/wilder-carbon>

¹⁶ TDC would produce 1100 tonne each year for 30 years = 33,000 tonnes.
33,000 / 270 = 122 hectares

Addressing emissions TDC has partial control over

4. Addressing the emissions in decisions and projects

The aim of this strategy is to reduce all emissions produced by TDC, therefore the impact of all decisions and activities on TDC's carbon footprint will need to be considered. If the decision taken reduces emissions then it is in line with this strategy.

Decisions that reduce emissions compared to the current situation include installing insulation and LED lighting, creating renewable energy, purchasing electric vehicles and creating woodland.

Guidance will need to be produced to enable directors and officers to consider emissions within proposals and decisions. Every decision that increases emissions will be seen as a risk to the environment, to society and to the council. It is clear we need to aim to reduce emissions in this decade.

Any action that causes extra annual emissions will also need to be addressed in the future which could be costly.

We will consider a Net zero decision policy that ensures decisions have had due regard to reducing emissions in line with the net zero strategy and carbon reduction plan.

TDC will also devise a method to calculate the emissions within projects and set targets to reduce these emissions.

Actions to 2024 include:

1. Calculate the estimated emissions within the activities of the council for the baseline year 2019- 2020 including projects
2. Investigate and agree a method to calculate the emissions within planned regeneration projects e.g. Levelling Up fund and planned estates projects up to 2024
3. Create a plan to reduce a) embodied emissions (through contract specifications) and b) functional emissions within TDC projects
4. Create advice to all directors and officers on how to consider greenhouse emissions in all decisions
5. Add climate change as consideration and sign off on all cabinet reports. All decisions will be asked to identify basic emissions sources within their decisions
6. Consider a Net zero decision policy that ensures decisions have had due regard to reducing emissions in line with the net zero strategy and carbon reduction plan.

Update: The emissions from our top 15 spends in our baseline year (2019-2020) were calculated between the first and final draft of this strategy. This totalled approx. 3,500 tonnes of CO₂e from a spend of approx. £21.5m - a similar volume of emissions created from our core carbon footprint (~4,000 tonnes).

The study found that a large volume of emissions is emitted from construction projects. They have a higher carbon/spend intensity due to the nature of their supply chain activities. The specifications within the procurement of these types of projects should therefore be targeted to reduce emissions associated with our spend.

5. Addressing the emissions within TDC purchases (Procurement)

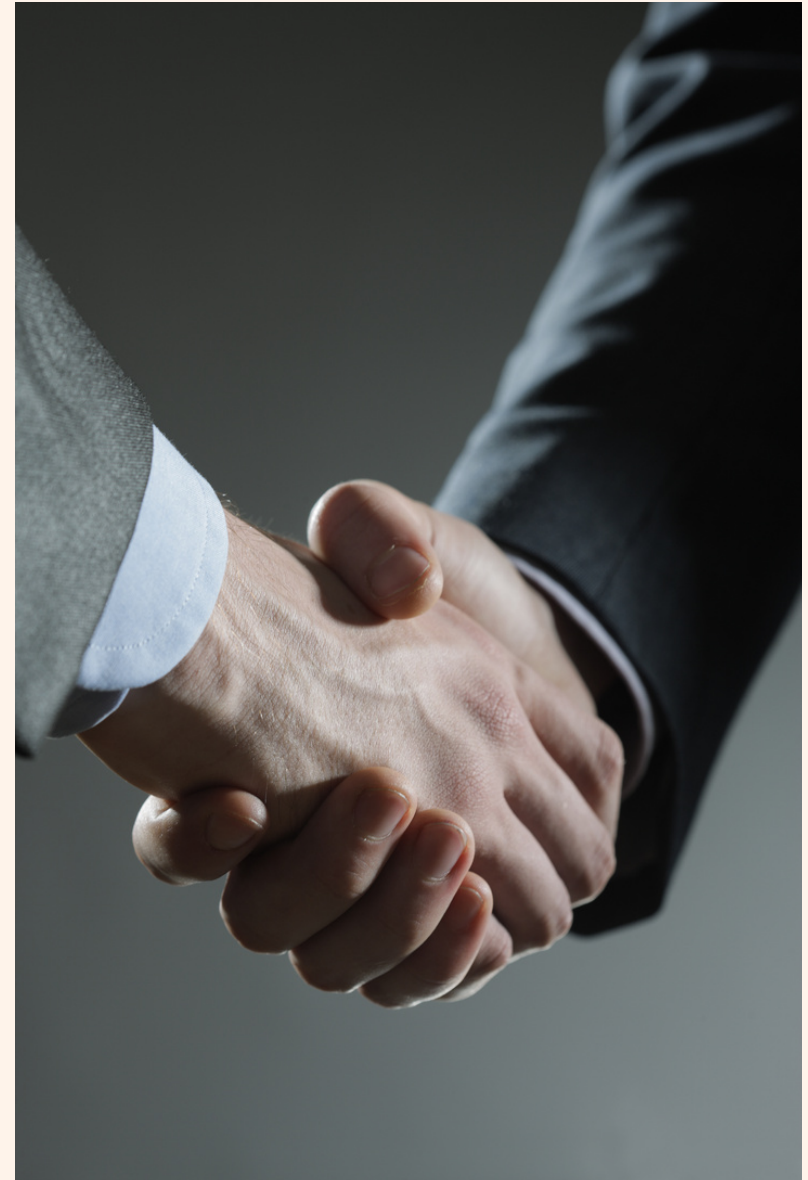
The TDC procurement team has already added a 5% weighting for net zero targets within their grading matrix for quotes and tenders. This means we ask competing companies to explain if they have calculated their carbon footprint and what they are doing to reduce it and grade their answer out of 5. This grade is added to their total score out of 100.

Going forwards, we are considering asking larger companies to calculate the emissions within the contracts. This will be vital to calculate and monitor our emissions reductions.

Working with the KCC procurement subgroup, TDC wants to set targets within our procurement which encourages the move towards net zero emissions within all contracts.

Actions to 2024 include:

1. Calculate the estimated emissions of the top 15 TDC contracts in the baseline year 2019 - 2020
2. Continue to ask companies about their carbon footprint and reduction in the procurement process. Evaluate the answers and improve the questions where necessary.
3. Create advice to officers on how to evaluate the answers within the tender response documents
4. Agree a net zero market statement.
5. Consider asking larger companies for the calculated carbon emissions within their contracts.



6. Addressing the emissions within our social housing and other buildings we own

The housing team is creating ambitious targets to improve the insulation and energy efficiency within TDC's social housing and has published a Social Housing Decarbonisation Strategy alongside this strategy.

We have calculated the estimated emissions from the energy use in our social housing. This totalled 9215 tonnes of CO₂e and is 4.9% of the total housing emissions across Thanet.

One of the first aims of the housing department is to make all properties EPC C by 2030, using capital schemes and government funding. By 2028, we will have trialled some options for decarbonising housing using the principles of fabric (insulation) first, worst first (worst properties) and no regrets.

This will include an education plan for tenants to ensure they understand how to use the new heating systems e.g. if air source heat pumps are installed, they need to be on all the time compared to gas boilers which are turned on and off.

The team will also set targets to decarbonise the heating supply of a percentage of the current social housing by 2030.

Any new social housing built will have strict criteria. For example, we will set stringent targets around the u values and energy emission standards to net zero for all new social housing building.

We can also set design briefs which include low embodied emissions, using guidance from the Green Building Standard and the Net Zero Carbon Toolkit.¹⁷

¹⁷ <https://www.westoxon.gov.uk/media/2ddb125k/net-zero-carbon-toolkit.pdf>

The government has banned the installation of gas boilers in new developments from 2025 and so we want to follow this ambitious target. We will not install gas boilers into new social housing as this will simply add to the fossil fuels being burned.

Landlord responsibilities

TDC own and lease a number of other buildings in our estates. As a landlord we will aim to increase the energy efficiency of these buildings and follow the forthcoming government guidelines. e.g. For commercial let premises the Government is consulting on raising the standard to EPC B by April 2030 with limited exceptions.¹⁸



Actions to 2024 include:

1. Complete a plan that ensures all social housing stock are EPC C by 2035, aiming for 2030 using capital schemes and government funding.
2. Create a full plan to fully decarbonise the heating of a percentage of the social housing that TDC own and take the plan to cabinet to agree.
3. Create a plan to meet the government guidelines around energy efficiency of commercial let properties.

¹⁸ Energy white paper (<https://www.gov.uk/government/publications/energy-white-paper-powering-our-net-zero-future>)

Thanet Wide Emissions

Apart from the TDC Local Plan, KCC is leading on addressing emissions Thanet wide which is laid out in the Low Carbon Energy and Emissions Strategy. This strategy shows how we will support KCC, the Government, business, industry and the community to make Thanet as a whole net zero by 2050.

7. Addressing emissions in the current housing stock: District wide Thanet housing retrofit action

37% of Thanet's GHG emissions are from domestic housing (187700 tonnes of CO₂e). The bulk of these emissions are from domestic heating and hot water. To decarbonise existing stock, a mixture of energy efficiency and low-carbon heating measures are required.

As it stands the UK's housing stock is amongst the most inefficient in Europe. Thanet Council's role is to facilitate the retrofitting of insulation, energy efficiency and low carbon measures into households of all tenures and income levels. This will be achieved by accessing national, regional and international funding for installing measures into low income homes, developing community energy initiatives and affordable and trustworthy solutions for all tenures and incomes. These actions will run alongside the Government's industry-led transformation of the heating appliance market towards low-carbon products.



The government also considers actions to improve home energy efficiency as the best long term method of tackling fuel poverty.¹⁹

There are a number of TDC actions within this priority:

1. Create a Domestic Retrofitting Action Plan Strategy for Thanet. Increasing energy efficiency and decreasing fuel poverty
2. Ensure installation of measures into homes by designing delivery routes for various funds through available funds (Green Homes Grants, Home Upgrade Grants, ECO4 etc.)
3. Continue to provide energy advice and referral service for residents of all tenures
4. Provide community advice including neighbourhood pop up advice events and door to door advice
5. Deliver training to partner organisations, the industry, landlords, letting/ estate agents
6. Develop the installer markets and associated skills. Including training in local colleges, working with local installers/surveyors.
7. Deliver a communication plan to assist all residents with reducing energy consumption and reduce energy bills, provide affordable warmth and reduce carbon emissions
8. Develop community energy decarbonisation initiatives.
9. Help address fuel poverty in the district by enabling households to access measures, funds, benefits and crisis support.

¹⁹[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1044598/6.7408 BEIS Clean Heat Heat Buildings Strategy Stage 2 v5 WEB.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1044598/6.7408_BEIS_Clean_Heat_Heat_Buildings_Strategy_Stage_2_v5_WEB.pdf)

8. Addressing emissions in Thanet's transport

25% of emissions (128100 tonnes of CO₂e) in Thanet come from transport and this needs to be addressed in various ways including supporting the shift from car use to active travel or public transport and the electrification of transport. This aim is led by KCC in the KCC Energy and Low Emission Strategy but assisted by TDC.

TDC can work with KCC on projects to encourage more cycle paths and therefore support/ encourage those wanting to cycle to school and work. The Council will seek to develop a cycling network in the district, and new development should take into account the needs of cycling. The change of thinking that is needed to move from car travel to more active travel can be assisted by the communication team. The TDC air quality team will also work with KCC on projects around air pollution from vehicles.

TDC can assist sustainable transport by creating an EV charging station plan for the land we own and drawing down government funding as and when it is released. We already have two fast chargers for residents and taxi drivers in our car parks and would like to install more when funding is available. The lack of charging points throughout Thanet is a barrier to some purchasing electric vehicles.

Active transport is already incorporated in policies within the local plan, however this can be reviewed to ensure it is a priority in decision making.



Actions to 2024 include:

1. Create an EV charging point plan for TDC owned land
2. Complete the installation of the currently funded electric charging points across the district
3. Finalise, agree and consult on the taxi licensing policy which will promote a shift to low emission vehicles
4. Create an action plan to encourage tourists to use public transport, walk or cycle
5. Promote KCC campaigns and activities to encourage people to walk and cycle. Encourage the public to use sustainable transportation, including public transport, car sharing, cycling, and walking
6. Work with KCC to create digital resources for schools on air quality and encouraging walking and cycling.

9. Addressing emissions produced by Thanet's businesses (commercial and industry)

The emissions from industry within Thanet make up 11.9% of the District's carbon footprint whereas the emissions from the commercial sector makes up 21.5%. In total they contribute 171900 tonnes of CO₂e.

TDC will promote KCC's actions e.g. LoCase project²⁰ which aims to facilitate local businesses in reducing their carbon footprint through grants and advice. We will provide new and updated information on our website and provide news flashes through our social media.

The teams that work with businesses at TDC can also advise them directly, such as the tourism team. They have already produced a Green Tourism Toolkit for businesses which gives guidance around setting net zero aims and reducing their environmental impact.

Actions to 2024 include:

1. Facilitate KCC to decrease emissions from tourism businesses e.g. through the green tourism toolkit.
2. Promote KCC courses e.g. STEM and funding streams e.g. LoCase through our networks e.g. tourism, members and residents newsletters.
3. Promote BEIS funding streams locally through our networks.

²⁰ <https://locase.co.uk/>



10. Addressing emissions from new housing and development: Local planning

TDC can directly influence the emissions of the district by the planning policies within the Local Plan. Currently, in TDC's Local Plan, housing must meet good energy efficiency standards. It is anticipated that the government will announce planning laws that stipulate zero carbon buildings in the future, however we are currently reviewing the local plan and will consider if it is viable to add any new policies to improve this even quicker. Currently, new houses are still using fossil fuels for their heat and power.

The government has announced that no new gas boilers will be installed from 2025 and we are waiting for the details of this in the government's final Future Homes Standard. It is important that these standards are added to building regulations, so that they will be stipulated automatically as a house is built. If the Government's Future Home Standard²¹ is ambitious it will mean that new homes will create a very small volume of GHG emissions, most likely having air source heat pumps to provide heat (instead of gas boilers) and also possibly solar panels for electricity.

The current local plan also stipulates that 1 electric vehicle charging point must be added for every 10 units built and we will ensure that this policy is also robust in commercial areas.

The local plan can also be used to encourage active transport across the district and this will be reviewed as part of the Thanet Transport Strategy and Cycling and Walking Strategy review.

²¹ <https://www.gov.uk/government/consultations/the-future-homes-standard-changes-to-part-l-and-part-f-of-the-building-regulations-for-new-dwellings>

As water use also creates some greenhouse gas emissions, as well as putting demand on our drought prone area, we will also investigate if we can introduce a policy which stipulates 100L per person per day in all new builds.

There are numerous actions within this section:

1. Estimate the extra greenhouse gas emissions due to development and transport within the local plan to 2031, for data collection and decision making purposes
2. Investigate the viability of low carbon housing policies that could be added to the local plan
3. Investigate the viability of a policy whereby modifications to existing homes must also improve energy efficiency and reduce emissions
4. Investigate the viability of including a 100L of water per person per day policy
5. Review the Thanet Transport Strategy alongside the local plan.
6. Create a high level cycling and walking strategy alongside the local plan using the Sustrans audit report
7. Review the planning policies around EV charging points in commercial development
8. Work with KCC transport on embedding sustainable transport into new developments e.g. cycle paths, connectivity to train stations to ensure that new developments add as little transport emissions as possible
9. Investigate any resource gaps within TDC planning with regards to analysing environmental aspects of applications.

11. Stimulating renewable energy production and Thanetwide carbon sequestration

In order for the UK to reach net zero, vast amounts of renewable electricity will need to be produced e.g. for new electric heating in housing and for powering future electric transport. Land in Thanet will therefore need to be considered for the installation of renewable energy production where appropriate. The planning team can carry out a call for sites to ask landowners if they are intending to create renewable energy projects, such as solar farms. This will enable a map of future installations to be drawn up.



The land in Thanet may also assist with carbon sequestration through woodland creation, hedgerow planting and wetland restoration. Levels of woodland creation will be limited as it is often inappropriate to turn highly productive farmland into woodland. Improved farming practices that increase soil carbon management would be more appropriate such as no till and cover crops, although calculating the amount of carbon sequestered in these projects is difficult at present.

Many projects will be led by Natural England and charities such as Kent Wildlife Trust e.g. Wilder Carbon. The South East Nature Partnership project called Accelerating Climate Based Solutions will help accelerate the supply and demand of these nature based solutions. Currently, this work is being trialled with Swale Borough Council.

Also, in conjunction with the Kent Nature Partnership, KCC are developing a Local Nature Recovery Strategy, which will support a portfolio of investment-ready projects for external funding in the future. The requirement to develop a Local Nature Recovery Strategy was confirmed in the Environment Act 2021²² with the detail on how to prepare and what to include still awaited.

KCC has also released their draft Tree Establishment Strategy (2022 - 2032)²³ which aims to plant one tree for every resident (1.5 million in total).²⁴ By 2050, KCC also aim to achieve an average tree canopy cover of 19% in Kent, the target recommended by the Committee on Climate Change. TDC is currently writing a Tree and Biodiversity Strategy and Action plan which will lay out how it can assist KCC in its aims and objectives within its powers and resources.

Actions to 2024 include:

1. Carry out a call for sites for renewable energy production e.g. solar farms.
2. Work with KCC on Local area energy planning to devise a plan for renewable energy across the district, where resources allow.
3. Support KCC with the Local Nature Recovery Strategy and Kent Tree Strategy within our powers and resources.
4. Finalise the TDC Tree and Biodiversity Strategy and Action Plan.

²² <https://www.legislation.gov.uk/ukpga/2021/30/contents/enacted>

²³ <https://letstalk.kent.gov.uk/plantree>

²⁴ <https://www.kent.gov.uk/environment-waste-and-planning/nature-and-biodiversity/trees/tree-planting-statement>

12. Addressing Thanet-wide consumption emissions including food and purchases: Climate Change Education and Communication

This section has the largest volume of emissions. As explained in the data section, approximately 971,068 tonnes of emissions are produced from our consumption, (DEFRA)²⁵ which is nearly double the emissions from the district's energy use. This includes the services used (e.g. education, NHS) and everything else that we buy e.g. household appliances, clothing and food.

KCC are currently leading on climate change communication Kent Wide through Kent Green Action,²⁶ but TDC produces a number of webpages on climate change²⁷ which will be updated regularly. We will inform the community what we are doing to tackle the emergency as well as give advice on how individuals can decrease their own carbon footprint.

We have split the carbon footprint into easy to understand sections: FOOD, HOUSE, TRAVEL, PURCHASES as well as a section on hobbies and how to inspire others. We are encouraging residents and staff to take a pledge to make a change in one or more of those sections and will create communication plans for each section.

We will also provide information on any government grants that may be available to assist people to reduce their carbon footprint. We currently run a sustainability forum that predominantly addresses litter and we hope that we can run

²⁵ www.gov.uk/government/statistics/uks-carbon-footprint - shows consumption data for the UK. It is then pro-rata'd using ONS local authority population estimates. 10.48 tonnes per person.

²⁶ <https://www.kent.gov.uk/environment-waste-and-planning/kent-green-action>

²⁷ <https://www.thanet.gov.uk/services/energy-and-climate-change/> and <https://www.thanet.gov.uk/wp-content/uploads/2020/10/Carbon-Footprint-pledge.pdf> (Also see appendix B.)

further forums which specifically aim to reduce greenhouse gas emissions.

As the Climate Change Committee (2020) explains, combating climate change

“can only be achieved if Government, regional agencies and local authorities work seamlessly together. More than half of the emissions cuts needed rely on people and businesses taking up low-carbon solutions – decisions that are made at a local and individual level. Many of these decisions depend on having supporting infrastructure and systems in place. Top-down policies go some way to delivering change, but can achieve a far greater impact if they are focused through local knowledge and networks.”

The Climate Change Officer will also give talks to Town and Parish Councils. These organisations are so important as they are the first tier of local government and are closest to Thanet residents. She will also give talks to community groups who would like to understand more about climate change and how to reduce their carbon footprint.

Actions to 2024 include:

1. Start a net zero community group forum by next summer. This will be in addition to the sustainability forum group which focuses on plastic and biodiversity.
2. Present climate change talks to Town and Parish Council and at community events.
3. Ensure all TDC staff are educated on climate change.
4. Create an overarching Net Zero Communication Plan which aims to reduce emissions within the full carbon footprint including food consumption and purchases.

CHALLENGES AND FUNDING

The Climate Change Committee (2019)²⁸ points out:

Local authorities have a range of existing levers that can be used to deliver local action that reduces emissions and prepares local areas to a changing climate. However, these levers alone are unlikely to be sufficient to deliver local authorities' Net Zero ambitions, due to gaps in powers, policy and funding barriers, and a lack of capacity and skills at a local level. Additionally, without some level of coordination from Government, the UK risks pursuing a fragmented strategy towards Net Zero.

At TDC we have called on the government for more joined up working and resources so that we can achieve our aims.

We are aware of the many barriers facing us on the road to net zero. Simply achieving net zero in the TDC offices, the fleet of vans and waste carrier vehicles is complex and costly, and involves not just changes in the way vehicles are powered, but could also affect the way people have worked for years. This challenge is not just about energy, but is about change and managing the losses and stress that is associated with new ways of working.

We also have a number of gaps in our powers which many residents are not aware of. TDC does not control roads, schools or healthcare and other aspects of the district and so the

²⁸ <https://www.theccc.org.uk/publication/local-authorities-and-the-sixth-carbon-budget/>

decarbonisation of these areas will need to be led by KCC through the Kent and Medway Energy and Low Emission Strategy.²⁹

Furthermore, and most importantly, TDC is a small council, having limited staff members who can work on the net zero plan. It is important that all staff members are motivated to achieve this goal, and that we can work with all groups in the community who are also willing to make the changes needed to decarbonise the Isle of Thanet.

One of the main challenges in reaching net zero by 2030 is the costs involved. For example, the cost of changing to a 16 vehicle electric fleet will be approximately £4 million Every 7 years, as well as the initial cost of upgrading the depot for charging which has not been calculated yet. The budgets at TDC are already stretched and therefore the majority of funding for climate change will need to be sourced externally, mainly through government funding. Currently, there is no funding for electric waste carrier vehicles however.

Cabinet has agreed to consider using the risk management reserve, if external funding from government cannot be applied for, or match funding is required. The use of the risk management reserve will also be considered to employ staff during essential projects (e.g. project managers), if the external funding does not cover this and these positions are necessary for the successful completion of an essential carbon reducing project.

Any proposed use of the risk management reserve for these purposes would be subject to the usual budget approval process.

²⁹ https://www.kent.gov.uk/about-the-council/strategies-and-policies/environment-waste-and-planning-policies/environmental-policies/kent-and-medway-energy-and-low-emissions-strategy_

HOW THIS STRATEGY WILL WORK AND PROGRESS BE MEASURED

A full action plan has been created to enact this strategy. It records the responsible service area's directors for each action within each priority. The action plan also shows if there is a gap in resources and funding and this information can be used in forward planning. A summary of these actions has been described throughout this strategy.

Monitoring and reporting are essential to ensure that actions taken are effective and enable informed decisions to be made. The Cabinet Member for Environmental Services and Special Projects, Director of Finance and the Climate Change Officer will review the action plan each month.

Each service area will be responsible for monitoring the success and impacts of their actions and the main responsible directors and officers will form part of the updated Net Zero Officer group which will meet every two months.

Members of the Net Zero Officer Group will provide updated information relevant to the Climate Change Cabinet Advisory Group which meets every two months, who will also monitor progress.. full report will also go to cabinet every summer, before decisions on the budget for the year are made. This way, any actions that are not proceeding as they should can be taken into consideration within the budget if necessary.

An external auditor will also monitor the progress on the action plan and the carbon reduction plan and report to the Overview and Scrutiny Committee annually.

The full carbon footprint of TDC will also be published each year to show progress made. The actions against the Thanet wide emissions will be reported through the KCC Kent Climate

Change Network and will feed into the Kent and Medway Energy and Low Strategy. As the role of TDC in Thanet wide emissions becomes clearer then more detailed reporting will be considered.

The full carbon footprint of TDC will also be published each year to show progress made. The actions against the Thanet wide emissions will be reported through the KCC Kent Climate Change Network and will feed into the Kent and Medway Energy and Low Strategy. As the role of TDC in Thanet wide emissions becomes clearer then more detailed reporting will be considered.

The council's work on climate change will also be overseen by Climate Emergency UK who use [council climate scorecards](#).



After public engagement on the first draft of this strategy, we have resolved to:

- add interim targets (to 2030 and 2040) for the emissions we have partial control over in the next action plan, which will be written in 2024.
- add the emissions from home working to future carbon footprinting calculations.
- consider calculating emissions from staff commuting when resources become available to collate the more complicated data set.

APPENDICES

Appendix A: Eco Anxiety

You might like to watch this Youtube video:
<https://www.youtube.com/watch?v=f52LJJFBCLc>

Ecologi recommends: The Climate Psychology Alliance holds regular online 'Climate Cafes' which you can attend to discuss fears & uncertainties about our climate & ecological crisis, all while in a safe and empathetic space with others who feel the same. See more here: <https://ecologi.com/articles/in-depth/whats-in-the-new-ipcc-report-and-what-does-it-mean>

Appendix B: Updated pledge

The pledge was updated at the climate change cabinet advisory group July 4th 2022.

Thanet District Council (TDC) called a Climate Emergency on 11 July 2019. As part of this declaration, the Council resolved to:

- Pledge to do what is within our powers and resources to make Thanet District Council carbon neutral by 2030, taking into account both production and consumption emissions;
- Call on Westminster to provide the powers and resources to make the 2030 target possible;
- Continue to work with partners across the County and region to deliver this new goal through all relevant strategies;
- Investigate all possible sources of external funding and match funding to support this commitment;

In December 2021, TDC added the following:

- We pledge to do what is within our powers and resources to support KCC, the Government, business, industry and the community to make Thanet as a whole net zero by 2050.

As the meaning behind the specific terms in this pledge became more explicit, it has become necessary to upgrade the wording of the pledge made on the 11 July.

The updates

The word carbon neutral was changed for Net Zero as it is a stronger commitment.

Net zero is a more robust term than carbon neutral. Carbon neutral means that you can offset emissions by supporting projects such as solar farms. However, these projects do not directly remove/absorb emissions from the atmosphere. Net zero means that any leftover (residual) emissions must be absorbed by carbon sequestration projects and directly removed from the atmosphere e.g. woodland creation projects. This is why Net zero is a more robust term.

Consumption emissions are now addressed in Partial Emissions element of our pledge on page 6 (the second bullet point).

This is because most companies in the UK have not set 2030 targets and therefore reaching net zero by 2030 within our consumption emissions is out of our control and unachievable. Many companies have however set 2050 targets.

We will instead work with companies to encourage them to reduce their emissions as quickly as possible and only buy things from companies that are serious about reducing their emissions in the future. We will aim to reduce emissions from procurement as quickly as possible, however it is simply not possible to reach net zero by 2030 for consumption as it is not within our direct control.

In summary, the updated pledge includes the term 'net zero' to make it a stronger pledge and clarify that our 2030 pledge is for emissions we have direct control over.³⁰ It adds a new sentence which addresses emissions that we only have partial control over e.g. consumption. Emissions from projects, procurement and social housing have been included here to ensure all emissions are addressed.

Appendix C: Calculation of Thanet's full carbon footprint including consumption emissions

UK emits 703,131 ktonnes = 703,131,000 of CO₂e due to its overall consumption including imports. ONS data: Population of UK: 67.1 million. ONS data: Population of Thanet: 141,819

$703,131,000 / 67,100,000 = 10.48$ tonnes per person x 141,819 people in Thanet = 1,486,068 tonnes of CO₂e

³⁰ We have also included the leisure centres which we do not actually have direct control over, but it was agreed that they should be included because if Your Leisure did not lease the buildings TDC would likely take them back in house.

Appendix D: Working with KCC on district-wide emissions

Climate change officers from each district in Kent (along with Medway) formally meet quarterly at the Climate Change Network (CCN) to share learning, exchange ideas, where possible identify shared approaches/joint projects, and receive and feed in to updates from KCC on the Kent and Medway wide implementation plan. In addition to these four formal meetings each year, the CCN meet more frequently for specific briefings and topic discussions, and as part of additional sub-groups, discuss areas like procurement, communications, taxi licensing and energy.

CCN feed upwards into the Kent and Medway Environment Group (KMEG), which also meets formally each quarter. This is a director level group that has strategic oversight of the implementation plan. It is chaired by Larissa Reed, Chief Executive at Swale, and has representation from all districts, KCC and Medway. It provides scrutiny, ensures the plan is staying on track and champions it corporately within each organisation.

An annual review of progress against the KCC implementation plan goes to KCC's Environment and Transport Cabinet Committee, usually in June/July and is published on KCC's website. KMEG ultimately reports upwards to Joint Kent Chief Executives and Kent Leaders. SMART targets are being drawn up including emissions from housing, transport, business and communities. District wide emissions will have interim targets to 2025, 2030 and 2040.

Appendix E: Emissions reductions model

The current emissions reduction pathway is shown below. Emissions left over at 2030 include those from the crematorium (grey bar) which will come to the end of its life in 2036. It is hoped that TDC can purchase an electric cremator in this year. Other left over emissions include the fuel use from trucks which do not currently have electric versions. It is hoped that electric versions will come on the market and can be included in the emission reduction model, rather than having to offset the emissions.

TDC Emissions - Forecast with Planned Carbon Reduction Options

